



HUGHES WETLAND DEVELOPMENT AND MAINTENANCE

BACKGROUND

The California red-legged frog (*Rana draytonii*) is a federally listed threatened species (25830 Federal Register Vol. 61, No. 101, May 1996). Critical Habitat has been designated (12816 Federal Register Vol. 75, No. 51, revised March 2010) within the French Creek watershed for this species: Hughes Place Pond, Unit BUT-1. The red-legged frog is particularly rare in the Sierra Nevada with fewer than a dozen known populations, and our goal is to increase critical habitat quality for the frog.

PROPOSED PROJECT LOCATION

Hughes Pond is one of only two California red-legged frog (CRLF) population sites on the Plumas, both located on the Feather River Ranger District. Hughes Pond is located approximately 3 miles northwest of Brush Creek Work Station (T. 22 N., R. 5 E., Sec. 27), Butte County, California (Figure 1).

PROPOSED PROJECT ACTION AND DESCRIPTION

The Feather River Ranger District proposes to build two ephemeral ponds to benefit the CRLF and other species. The CRLF is listed by the U.S. Fish and Wildlife Service as threatened under the Endangered Species Act, and pond development is aimed at restoring designated critical habitat (BUT-1) for one of two populations known to occur on the forest. Constructed ponds will be shallow basins, deepest in the center, no more than 50 feet in diameter. Proposed pond development sites are within 300 feet of the small existing pond that supports this isolated frog population in Butte County.

PURPOSE OF ACTION

To increase the amount of available aquatic habitat in order to assist in recovery of the California red-legged frog. Proposed wetland development requires minimal maintenance and also meets the objectives of providing habitat for birds, bats, other amphibians, aquatic reptiles, aquatic insects, and drinking water for a variety of wildlife. General ecological benefits such as reduced erosion and improved water quality also will be realized by restoring functional wetlands on the landscape through proposed activities. The ephemeral nature of proposed ponds will not support fish or bullfrogs, two known CRLF predators and competitors, and will support California redlegged frog breeding without exposing eggs and larvae to predatory fish and bullfrogs. Wetlands will be built such that ponds will gradually dry over the summer, before filling again during the winter rainy season. No dams will be built during this project, wetlands will be supplied naturally with rainwater.





NEED FOR ACTION

The Recovery Plan (2010) for the California red-legged frog outlines numerous goals for species recovery. Two major goals are to protect and improve existing, and provide additional breeding habitat. The Plumas National Forest (Plumas) is working with the U.S. Fish and Wildlife Service (USFWS) to implement activities to achieve critical habitat goals such as wetland protection and maintenance, wetland development, land exchange or purchase, and non-native invasive species control.

COLLABORATIVE INVOLVEMENT

This action was presented at meetings of the Feather River Ranger District (FRRD) Collaborative and the Butte County Forest Advisory Committee (FAC).

- 1. Development. The project was made possible by a habitat improvement grant provided by the U.S. Fish and Wildlife Service.
- 2. Input. Collaborative input was accomplished through the following methods:
 - a. Collaborative Meetings.
 - i. FRRD Collaborative: June 5, September 12, and November 8, 2018.
 - FRRD provides project updates and answers questions on pending, proposed, and modified projects at the monthly Butte County FAC meeting.
 - b. Field Trips. July 25, 2018, U.S. Fish and Wildlife Service.

TRIBAL INVOLVEMENT

The following tribes were invited to participate in the development, review, and implementation of the proposed project: Estom Yumeka Tribe of Enterprise Rancheria, Tyme Maidu Tribe of Berry Creek Rancheria' Concow Maidu Tribe of Mooretown Rancheria, and Mechoopda Indian Tribe of Chico Rancheria.

PUBLIC INVOLVEMENT

This action was listed March 28, 2017, as a proposal on the Plumas National Forest Schedule of Proposed Actions (SOPA), as well as the Feather River Ranger District 10 year Strategic Plan and Forest Program of Work (POW).

Development. The following agencies were notified/informed of the Proposed Action:

- 1. U.S. Fish and Wildlife Service.
- 2. California State Historic Preservation Officer (SHPO).





DECISION TO BE MADE

To approve pond construction requiring approximately one week during late June 2019. The action involves using an excavator and a skid-steer to dig each depression. A few small diameter trees will be removed to provide equipment access. An aquatic-safe liner and set of matching 16 oz. geotextile pads will be used to build two natural appearing, oval-shaped ponds using the surface water-compacted clay liner technique (ponds numbered 1 and 2 on the map). This involves reshaping and compacting soils onsite that are sandy loam, and then placing topsoil that is not compacted, and woody debris, on top of the liner-covered and compacted soil. Soil removed during excavation will be deposited to a depth of 6 inches on top of pond liners. Disturbed ground will be reseeded with material collected from adjacent native vegetation.

Pond 3 shown on the project map, was developed as an alternate pond site should disqualifying difficulties arise during implementation at sites 1 and 2.

Shrubs and small diameter trees removed during wetland development will be placed in the wetland after construction is completed. Down logs in the area also will be placed within and around completed ponds to both provide wildlife habitat and to control motor vehicle access to the wetlands. Several project design features will be employed to protect California red-legged frogs as per consultation with U.S. Fish and Wildlife Service on the project.

This action is categorically excluded from documentation in an environmental impact statement (EIS) or an environmental assessment (EA). The applicable category of actions is identified in agency procedures as 36 CFR 220.6(e)(6), Timber stand and/or wildlife habitat improvement activities that do not include the use of herbicides or do not require more than 1 mile of low standard road construction.

This category of action(s) is applicable because the project was planned specifically to provide habitat for the California red-legged frog, and Western pond turtle, for the USDA Forest Service, by Tom Biebighauser, a wildlife biologist and wetland ecologist who has restored over 1,900 wetlands in 23-States, Canada and New Zealand. He retired in 2013 after working 34-years for the Forest Service. Tom has studied drainage and irrigation for 33-years. He teaches practical, hands-on workshops where participants learn how to restore wetlands by becoming involved in the design and construction of naturally appearing and functioning wetlands. Tom has written 4-books about wetland restoration, and instructs online college and field courses on the topic. He received the National Wetlands Award for Conservation and Restoration in 2015.

Tom worked on the ground with the following Forest Service employees to design the wetland projects; Joanna Arroyo (biological technician), Oswaldo Angulo (hydrologist), Clay Davis (planner), Lauren Hoyle (wildlife biologist-Tahoe National Forest), Cindy Roberts (wildlife biologist), Alax Parker (engineering technician), Eric Mathews (biological technician), and Mary Muchowski (biological technician).